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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,249

01/25/2005

Kazuyuki Kashiwabara

2005-0091A

6203

52349

7590

07/08/2009

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EXAMINER

TAHA, SHAQ

ART UNIT

PAPER NUMBER

2446

MAIL DATE

DELIVERY MODE

07/08/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/522,249	KASHIWABARA ET AL.	
	Examiner	Art Unit	
	SHAQ TAHA	2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3 - 5, and 13 - 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3 - 5, and 13 - 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a non-final action for application number 10/522,249 based on after a Request for Continued Examination filed on 04/30/2009. The original application was filed on 01/25/2005. Claims 1, 3 – 5, and 13 – 18 are currently pending and have been considered below. Claims 1, 14, 15, and 16 are amended. Claims 2, 6 – 12 are cancelled. Claims 1, 14, 15 and 16 are independent claims.

Applicant's Response

Applicant's arguments with respect to claims 1, 3 – 5, and 13 – 18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations “season” in claim 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 3, 4, and 14 - 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoyagi et al. (US 6,901,275).

Regarding claims 1, 14, 15, and 16, a device, having a master function for managing at least one slave device, for use in a network system in which a master device manages the at least one slave device, and the master device is allowed to shift a managing function thereof to one of the at least one slave device, **[the wireless communication device Pa is previously defined as a master, and the other wireless communication devices Pb, Pc, Pd are previously defined as slaves, as shown in Fig. 1, (Aoyagi et al., Col. 3, lines 47 – 52)],**

the device comprising: an own device information managing section operable to manage own device information of the device, which includes at least predetermined information, regarding a state change of the device, **[wireless communication devices Pa, Pb, Pc, Pd, managed in each control unit 14c, wherein the managing section is the control unit as shown in Fig. 2, (Aoyagi et al., Col. 6, lines 20 – 25)],**

an other device information managing section operable to manage other device information regarding at least one other device connected to the network system, the other device information including at least availability of the master function, **[wireless communication devices Pa, Pb, Pc, Pd, managed in each control unit 14c, wherein the managing section is the control unit as shown in Fig. 2, (Aoyagi et al., Col. 6, lines 20 – 25)],**

a schedule information managing section operable to manage schedule information indicative of master device candidates by a plurality of segments of at least time of day or season, **[a function of giving the elapse time since becoming a master, which is obtained by the timer 13, as shown in Fig. 2, Ref # 13, (Aoyagi et al., Col. 4, lines 12 – 15)],**

a device information processing section operable, when the device operates as the master device by performing a master operation, to specify, at a predetermined time, a slave device from among a plurality of slave devices which are the master device candidates indicated by the schedule information in a segment of at least time of day or season corresponding to the predetermined time based on the other device information, and operable to obtain predetermined information regarding a state change of the specified slave device from the specified slave device, **[When the wireless communication device Pa that is the master receives the battery information sent from the wireless communication devices Pb, Pc, Pd that are the slaves (Step S1), it creates a list as shown in FIG. 6 and decided a candidate for the next master, based on the battery information, (Aoyagi et al., Col. 5, lines 56 – 65)],**

and a switch controlling section operable to compare the predetermined information regarding the state change of the specified slave device obtained by the device information processing section with the predetermined information regarding the state change of the device operating as the master device included in the own device information, **[by comparison between the battery remaining amount included in the battery information of the master and the battery remaining amount of each slave itself, (Aoyagi et al., Col. 6, lines 31 – 38)],**

and operable, when the state change of the specified slave device is smaller than the state change of the device operating as the master device, to switch operations of the device operating as the master device and the specified slave device with each other by causing the specified slave device to perform the master operation previously performed by the device operating as the master device and causing the device operating as the master device to no longer perform the master operation and to perform a slave previously performed by the specified slave device, **[and when the battery remaining amount of the master is less than that of a slave, the slave can inform the master that it can become a master (master/slave switching possibility in the battery information as shown in FIG. 5), (Aoyagi et al., Col. 6, lines 38 – 45)].**

Regarding claim 3, the device according to claim 1, wherein the predetermined time is a time when a change occurs to the own device information of the device managed by the own device information managing section, **[The master/slave switching condition includes, (1) the elapse time since becoming a master,**

Art Unit: 2446

(2) the battery remaining amount, (3) the communication possible time, (Aoyagi et al., Col. 6, lines 47 - 52)].

Regarding claim 4, the device according to claim 3, wherein the change of the own device information of the device is a reduction in a remaining amount of battery life, **[The master/slave switching condition includes, (1) the elapse time since becoming a master, (2) the battery remaining amount, (3) the communication possible time, (Aoyagi et al., Col. 6, lines 47 - 52)].**

Regarding claim 13, the device according to claim 1, wherein the switch controlling section transmits the other device information managed by the other device information managing section to the specified slave device, **[The wireless communication device Pa that is the master, sends and receives data to and from the wireless communication devices Pb, Pc, Pd that are slaves as the communication parties, (Aoyagi et al., Col. 3, lines 50 – 55)].**

Regarding claim 17, the device according to claim 1, wherein the master device candidates indicated by the schedule information in a segment of time of day is at least one device other than a device which is likely to be frequently used in the segment of the time of day, **[When the wireless communication device Pa that is the master receives the battery information sent from the wireless communication devices Pb, Pc, Pd that are the slaves (Step S1), it creates a list as shown in FIG. 6 and**

Art Unit: 2446

decided a candidate for the next master, based on the battery information, (Aoyagi et al., Col. 5, lines 56 – 65)].

Regarding claim 18, the device according to claim 1, wherein the master device candidates indicated by the schedule information in a segment of season is at least one device other than a device which is likely to be frequently used in the segment of season, **[When the wireless communication device Pa that is the master receives the battery information sent from the wireless communication devices Pb, Pc, Pd that are the slaves (Step S1), it creates a list as shown in FIG. 6 and decided a candidate for the next master, based on the battery information, (Aoyagi et al., Col. 5, lines 56 – 65)].**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyagi et al. (US 6,901,275), in view of Liang et al. (US 2002/0122405)

Regarding claim 5, Aoyagi et al. teaches a communication system for performing data communication between one master unit and a plurality of slaves, **(Aoyagi et al., Col. 1, lines 15 – 20)**,

Aoyagi et al. fails to teach that the change of the own device information of the device is a reduction in communication quality,

Liang et al. teaches comparing the communications channel quality indicators with the same indicators from the slave units, the master unit 710 (and the slave units) will be able to determine which unit between them has the best signal quality, **(Liang et al., Paragraph 65)**, in order to initiate a master-slave switch, **(Liang et al., Paragraph 65)**,

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Aoyagi et al. by including that the change of the own device information of the device is a reduction in communication quality wherein Liang et al. teaches comparing the communications channel quality indicators with the same

Art Unit: 2446

indicators from the slave units, the master unit 710 (and the slave units) will be able to determine which unit between them has the best signal quality, (**Liang et al., Paragraph 65**), in order to initiate a master-slave switch, (**Liang et al., Paragraph 65**).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Shaq Taha** whose telephone number is 571-270-1921. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Jeff Pwu** can be reached on 571-272-6798.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free?).

/Shaq Taha/

Examiner, Art Unit 2446

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2446

Application/Control Number: 10/522,249
Art Unit: 2446

Page 10